

IN THE CLAIMS:

1.-82. (cancelled)

83. (currently amended) A method for making RNA using a target nucleic acid sequence in a target nucleic acid as a template, the method comprising:

- (a) amplifying the target nucleic acid sequence in a template-dependent process that comprises ligating two or more oligonucleotides in the presence of the target nucleic acid, wherein at least one of said two or more oligonucleotides comprises a single-stranded promoter that does not anneal to said target nucleic acid; and
- (b) transcribing the ligation product from step (a) with an RNA polymerase, wherein said RNA polymerase lacks helicase-like activity and can transcribe RNA using said single-stranded promoter.

84. (previously presented) The method of claim 83 wherein the RNA polymerase is a N4 virion RNA polymerase.

85. (currently amended) The method of claim 84 comprising the steps of:

- (a) obtaining the N4 virion RNA polymerase;
- (b) obtaining DNA, wherein said obtaining comprises:
 - (i) providing a sample containing a target nucleic acid having a target nucleic acid sequence;
 - (ii) annealing first and second probe oligonucleotides adjacently to each other on [[a]] said target nucleic acid, wherein said first probe oligonucleotide comprises said single-stranded promoter, wherein said single-stranded promoter comprises a N4 virion RNA polymerase promoter sequence; and
 - (iii) ligating said first and second probe oligonucleotides to one another to generate said DNA;
- (c) admixing said N4 virion RNA polymerase and said DNA; and
- (d) culturing said N4 virion RNA polymerase and said DNA under conditions

effective to allow RNA synthesis.

86. (previously presented) The method of claim 85 wherein the N4 virion RNA polymerase is mini-vRNAP, a single transcriptionally active polypeptide that is approximately 1,100 amino acids in length and that corresponds to the middle 1/3 of the complete N4 virion RNA polymerase between amino acid 998 and amino acid 2103 of the full-length N4 virion RNA polymerase, or wherein the N4 virion RNA polymerase is the Y678F mutant form of mini-vRNAP, wherein the amino acid at position number 678 is phenylalanine rather than tyrosine.

87. (currently amended) The method of claim 85 wherein the N4 virion RNA polymerase is a polypeptide that has the amino sequence set forth in SEQ ID NO:4 or SEQ ID NO:6 or a mutant of the polymerase of SEQ ID NO:4 or SEQ ID NO:6, ~~such as a mutant with a mutation at position number Y678, such as the polypeptide that has the amino sequence set forth in SEQ ID NO:8,~~ or a transcriptionally active portion of any of these sequences.

88. (previously presented) The method of claim 83 wherein the target nucleic acid consists of a target sequence tag that is joined to an analyte-binding substance and the method is used for detecting an analyte to which the analyte-binding substance binds, wherein, prior to performing step (b), the method additionally comprises the steps of: obtaining the analyte-binding substance to which the target sequence tag is joined; contacting the analyte-binding substance to which the target sequence tag is joined with the analyte to form a specific binding pair; removing the analyte-binding substance molecules that are not bound to the analyte from the specific binding pair; and providing the specific binding pair from which the analyte-binding substance molecules that are not bound to the analyte have been removed.

89. (previously presented) The method of claim 88 wherein the RNA polymerase is a N4 virion RNA polymerase.

90. (previously presented) The method of claim 89 wherein the N4 virion RNA polymerase is mini-vRNAP, a single transcriptionally active polypeptide that is approximately

1,100 amino acids in length and that corresponds to the middle 1/3 of the complete N4 virion RNA polymerase between amino acid 998 and amino acid 2103 of the full-length N4 virion RNA polymerase, or wherein the N4 virion RNA polymerase is the Y678F mutant form of mini-vRNAP, wherein the amino acid at position number 678 is phenylalanine rather than tyrosine.

91. (currently amended) The method of claim 90 wherein the N4 virion RNA polymerase is a polypeptide that has the amino sequence set forth in SEQ ID NO:4 or SEQ ID NO:6 or a mutant of the polymerase of SEQ ID NO:4 or SEQ ID NO:6, ~~such as a mutant with a mutation at position number Y678, such as the polypeptide that has the amino sequence set forth in SEQ ID NO:8,~~ or a transcriptionally active portion of any of these sequences.

92. (previously presented) The method of claim 88, wherein the analyte is selected from a biochemical molecule, a biopolymer, a protein, a glycoprotein, a lipoprotein, an enzyme, a hormone, a biochemical metabolite, a receptor, an antigen, an antibody, a nucleic acid, a DNA molecule, an RNA molecule, a polysaccharide, and a lipid, and/or wherein the analyte-binding substance is selected from a nucleic acid, a polynucleotide, an oligonucleotide, a DNA molecule, an RNA molecule, a molecule comprising both DNA and RNA mononucleotides, modified DNA mononucleotides, a molecule obtained by a method termed "SELEX", a nucleic acid molecule or a polynucleotide molecule having an affinity for protein molecules, an operator, a promoter, an origin of replication, a ribosomal nucleic acid sequence, a sequence recognized by steroid hormone-receptor complexes, a peptide nucleic acid (PNA), a molecule prepared by using a combinatorial library of randomized peptide nucleic acids, an oligonucleotide or polynucleotide with a modified backbone that is not an amino acid, a lectin, a receptor for a hormone, a hormone, and an enzyme inhibitor.

93. (currently amended) A method of making RNA comprising:

(a) obtaining a N4 virion RNA polymerase consisting of either: mini-vRNAP; or the Y678F mutant form of mini-vRNAP, wherein the amino acid at position number 678 is phenylalanine rather than tyrosine;

(b) obtaining a single-stranded DNA oligonucleotide wherein said single-stranded

DNA oligonucleotide contains a N4 virion RNA polymerase promoter sequence;

(c) admixing said N4 virion RNA polymerase and said single-stranded DNA oligonucleotide; and

(d) culturing said N4 virion RNA polymerase and said single-stranded DNA oligonucleotide under conditions effective to allow RNA synthesis.

94. (previously presented) The method of claim 93 wherein step (b) comprises:

- (i) providing a target nucleic acid that exhibits a target nucleic acid sequence;
- (ii) amplifying the target nucleic acid sequence in a template-dependent process that comprises ligating two or more oligonucleotides in the presence of the target nucleic acid as a template.